Key Concepts in Intellectual and Social Capital and Networks: A Biblio-Glossary for the Social Future of Academic Libraries

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The conceptual landscape of intellectual and social capital is complex, pluralist and dynamic: the literature of the field reveals diverse perspectives, eclectic interpretations and the continual emergence of new forms of capital as sub-components, specific combinations or rival versions of existing concepts. Social capital concepts and theories have proven value as frameworks for research in higher education, but have thus far been underused in academic libraries. The thematic reviews and case studies contributed to The Social Future of Academic Libraries have shown how contemporary scholarship has generated a rich set of conceptual frameworks, models and tools that can be used to gain insights into social issues and problems of the 21st century. Our book on The Social Future of Academic Libraries is intent on accelerating the take-up and application of intellectual and social capital concepts in academic librarianship by demonstrating their utility and demystifying their complexity. Our glossary of intellectual and social capital and network concepts is designed to help you interpret both the current text and your future reading. Rather than supplying our own working definitions of the concepts and terms introduced or referenced in the book, we have drawn largely on the primary literature of the field to explain the meanings of concepts in the words of their originators (authors or translators). In many cases we have chosen two or more definitions to reflect different perspectives on a concept or illustrate its evolutionary development. The entries are arranged alphabetically with selective crossreferencing to highlight related concepts. The supporting reference list forms a select bibliography that is also intended to serve as an introductory guide to classic and contemporary literature of the field. This glossary has a largely theoretical focus; it is complemented by a second 'biblio-glossary' with a more empirical orientation covering social developments in higher education and the wider environment.

Academic capital: (1) [cultural/educational] 'the guaranteed product of the combined effects of cultural transmission by the family and cultural transmission by the school (the efficiency of which depends on the amount of cultural capital directly inherited from the family). Through its value-inculcating and value-imposing operation, the school also helps (to a greater or lesser extent, depending on the initial disposition, i.e., class of origin) to form a general, transposable disposition towards legitimate culture' (Bourdieu 1984, p. 23)

(2) [symbolic/political] 'obtained and maintained by holding a position enabling domination of other positions and their holders, such as all the institutions entrusted with controlling access to the [academic] corps . . . this power over the agencies of reproduction of the university body ensures for its holders a statutory authority, a kind of function-related attribute which is more linked to hierarchical position than to any extraordinary properties of the work or the person' (Bourdieu 1988, p. 84) 'social processes that build family knowledge of educational and career options and support navigation through educational systems and professional organizations . . . College knowledge along with other forms of academic capital acquired by individuals and transmitted by families and communities serve as forces that reproduce the elite and middle classes in society.' 'Academic capital acquisition – access to support systems and networks of people to expand opportunities . . . can be developed through social, educational, and financial interventions' (St. John, Hu & Fisher 2011, p. 1)

see also Campus capital, Educational capital, Learning capital

- Academic capitalism: 'privatization' [of higher education] 'institutional and professorial market or market-like efforts to secure external funds . . . an environment in which faculty and professional staff expend their human capital stocks increasingly in competitive situations. In this environment, university employees simultaneously are employed by the public sector and increasingly autonomous from the public, corporate body. They are academics who act as capitalists from within the public sector: they are state-subsidized entrepreneurs' (Rhoades & Slaughter 1997, p. 13; Slaughter & Leslie 1997, pp. 8, 9) 'forming new intersectoral networks' - 'groups of actors - faculty, students, administrators, and academic professionals . . . using a variety of state resources to create new circuits of knowledge that link higher education institutions to the new economy . . . also use state resources to enable interstitial organizations to emerge that bring the corporate sector inside the university, to develop new networks that intermediate between private and public sector, and to expand managerial capacity to supervise new flows of external resources, investment in research infrastructure for the new economy, and investment in infrastructure to market institutions, products, and services to students' (Slaughter & Rhoades 2004, pp. 1, 33) see also Transnational academic capitalism
- Adjacent possible(s): 'a theory of the persistent coming into existence of new goods and services and extinction of old goods and services, rather like the persistent emergence of new species in an ecosystem and extinction of old species . . . The biosphere and econosphere are persistently transforming, persistently inventing, persistently dying, persistently getting on with it, and, on average, persistently diversifying' (Kauffman 2000, pp. 216–217)

'a kind of shadow future, hovering on the edges of the present state of things, a map of all the ways in which the present can reinvent itself.' 'In our work lives, in our creative pursuits, in the organizations that employ us, in the communities we inhabit – in all these different environments, we are surrounded by potential new configurations, new ways of breaking out of our standard routines . . . can be as simple as changing the physical environment you work in, or cultivating a specific kind of social network, or maintaining certain habits in the way you seek out and store information' (Johnson 2010, pp. 31, 40–41)

- Apomediation: 'highly complex networks of individuals [influential peers and opinion leaders] and tools guiding consumers to credible information', 'human or technological agents that guide users to trustworthy sources and messages', 'traditional intermediaries are . . . complemented and replaced by "apomediaries," who stand by consumers to guide them to trustworthy information, and/or provide credibility cues for information or sources' (Eysenbach 2008, pp. 138, 140, 144)
- Aspirational capital: 'the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers' (Yosso 2005, p. 77)
- Asset: 'a special kind of resource that an individual organization, or entire community can use to reduce or prevent poverty and injustice . . . usually a "stock" that can be drawn upon, built upon, or developed, as well as a resource that can be shared or transferred across generations' (Oliver 2001, p. xii)
 'a prior cost that has a future benefit. Traditional accounting defines assets as (1) probable future economic benefits (2) obtained or controlled by a particular entity (3) as a result of past transactions or events' (Snyder & Pierce 2002, pp. 469–470)

see also Intangible assets

- Balanced scorecard (BSC): 'a set of measures that gives top managers a fast but comprehensive view of the business. The balanced scorecard includes financial measures that tell the results of actions already taken. And it complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities – operational measures that are the drivers of future financial performance . . . allows managers to look at the business from four important perspectives' (Kaplan & Norton 1992, pp. 71, 72) *see also* Strategy maps
- Bonding social capital ('exclusive', within groups): 'inward-looking and tend[s] to reinforce exclusive identities and homogenous groups', 'good for "getting by" . . . bolsters our narrower selves . . . constitutes a kind of sociological superglue' [works like an adhesive] (Putnam 2000, pp. 22, 23) *see also* Strong ties
- **Bridge:** 'a line in a network which provides the *only* path between two points . . . a bridge has one liaison person on each side . . . one can be a liaison between two network sectors only if all [one's] ties into one or both are weak' (Granovetter 1973, pp. 1364, 1367–1368)

'An individual who is a member of multiple clusters in the network (linking pin)' (Tichy, Tushman & Fombrun 1979, p. 508)

'a (strong or weak) relationship for which there is no effective indirect connection through third parties . . . a bridge is a relationship that spans a structural hole' (Burt 2005, p. 24)

- Bridging social capital ('inclusive', across or between groups): 'outward-looking and encompass[es] people across diverse social cleavages', 'crucial for "getting ahead"... can generate broader identities and reciprocity... provides a sociological WD-40' [works like a lubricant] (Putnam 2000, pp. 22, 23) *see also* Linking social capital, Weak ties
- **Brokerage:** 'the action of coordinating across the [structural] hole with bridges between people on opposite sides of the hole, and network entrepreneurs, or brokers, are the people who build the bridges' (Burt 2005, p. 18)
- Built capital: 'material goods tools, machines, buildings and other forms of infrastructure which contribute to the production process but do not become embodied in its output' (Porritt 2007, p. 139)

'material objects, systems or ecosystems created and/or cultivated by humans, including the functions they perform. It is the world of human design in which intellectual capital may also be embedded and/or expressed' (McElroy & Thomas 2015, p. 427)

'roads, buildings (houses, businesses, warehouses), and other physical features (railroad tracks, bridges, vacant land) . . . the stock of buildings (houses, retail stores, factories) and infrastructure (roads, water, sewers) in a locality' (Green & Haines 2016, p. 190)

also known as 'constructed/manufactured/physical/technological capital' *see also* Digital capital

- **Business capital:** 'Relationships with: customers; suppliers; allies; competitors; media and corporate image; quality improvement and promotion institutions', 'the value for the organization of its relationships with the main agents connected with its core business process' (Bueno, Salmador & Longo-Somoza 2014, pp. 342, 343) *see also* Relational capital
- Campus capital: 'the various forms of social capital that enhance students' on-campus experiences that . . . affect their persistence to graduation . . . through relational networks' (Rowan-Kenyon, Martinez Alemán & Savitz-Romer 2018, p. 27) 'the campus specific information needed to successfully navigate the university', 'the institution-specific knowledge they need to navigate a particular campus . . . how to choose their courses, whom to talk to for advising, or how the institution handles transfer units' (Shaw & Chin-Newman 2017, pp. 65, 72) *also known as* 'college capital'
- **Capability approach:** 'a particular approach to well-being and advantage in terms of a person's ability to do valuable acts or reach valuable states of being . . . the

alternative combinations of things a person is able to do or be – the various "functionings" he or she can achieve . . . based on a view of living as a combination of various "doings and beings", with quality of life to be assessed in terms of the capability to achieve valuable functionings . . . The freedom to lead different types of life is reflected in the person's capability set' (Sen 1993, pp. 30, 31, 33) 'a species of a human rights approach . . . the pertinent goal is to make people able to function in a variety of areas of central importance . . . ten "Central Human Capabilities," including Life, Bodily Health, Bodily Integrity, the Development and Expression of Senses, Imagination and Thought, Emotional Health, Practical Reason, Affiliation (both personal and political), Relationships with Other Species and the World of Nature, Play, and Control over One's Environment (both material and social)' (Nussbaum 2007, p. 21)

also known as 'human development approach'

Capital: 'sources of profit, advantage, and power, as well as net assets and resources' (Côté & Levine 2002, p. 143)

'a stock of anything that has the capacity to generate a flow of benefits which are valued by humans. It is this flow – normally of goods and services of benefit to people – that makes the capital stock an asset, and the value of the asset is derived directly from the lifetime value of the flows to which it gives rise' (Porritt 2007, p. 138)

'often thought of only as money, capital can describe any resource or asset that stores and provides value to people – such as the global commons. When invested in and managed responsibly, the asset creates value. If we erode it, as we have with our commons, we limit its ability to provide value, and if we degrade it too much, it can stop providing value all together or even become a cost' (Ishii 2021, "Global Commons" section, para. 2)

see also Academic, Aspirational, Built, Business, Campus, Career, Cultural, Digital, Economic, Educational, Emotional, Ethnic, Experiential, Familial, Financial, Human, Identity, Information(al), Innovation, Institutional, Intellectual, Learning, Linguistic, Mobility, Moral, Natural, Navigational, Organisation(al), Political, Process, Psychological, Relational, Reputational, Resistant, Social, Spiritual, Structural, Symbolic, Systemic and Transitional capital

- **Career capital:** 'the career assets that we bring to our successive employment settings . . . the key personal knowledge that enables us to contribute to the knowledge economy [using] three ways of knowing:
 - *Knowing-why:* The energy, sense of purpose, motivation and identification with the world of work we bring to our careers
 - *Knowing-how*: The skills, expertise, tacit and explicit knowledge that we draw from and accumulate in our careers

• *Knowing-whom*: The attachments, relationships, reputation, sources of information and mutual obligations we gather over our careers' (Inkson & Arthur 2001, pp. 51, 52)

'the different modes of support the individual obtains and has at his/her disposal and may invest for his/her further career success', 'those capitals used by the agent for work-related activities that are valued by the career fields . . . symbolic capital, recognized by other actors and the rules of the field as legitimate, valid and useful:

- Cultural Capital What I can (education, social and technical skills, diplomas, etc.)
- Social Capital Whom know and who knows about me (social relations, networks, group membership, etc.)
- Economic Capital What I possess (possibility of conversion)' (Iellatchitch, Mayrhofer & Meyer 2003, pp. 733, 735)

see also Graduate capital model

College capital: see Campus capital

- **Community capitals framework (CCF):** 'a way to analyze community and economic development efforts from a systems perspective by identifying the assets in each capital (stock), the types of capital invested (flow), the interaction among the capitals, and the resulting impacts across capitals . . . natural, cultural, human, social, political, financial, and built capitals' (Emery & Flora 2006, p. 20)
- **Community cultural wealth:** 'an array of knowledge, skills, abilities and contacts possessed and utilized by Communities of Color to survive and resist macro and micro-forms of oppression . . . through at least 6 forms of capital such as aspirational, navigational, social, linguistic, familial, and resistant capital. These various forms of capital are not mutually exclusive or static, but rather are dynamic processes that build on one another' (Yosso 2005, p. 77)

see also Funds of knowledge

Constructed capital: see Built capital

Cultural capital: 'is convertible, in certain conditions into economic capital and may be institutionalized in the form of educational qualifications . . . can exist in three forms: in the *embodied* state, i.e., in the form of long-lasting dispositions of the mind and body; in the *objectified* state, in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.), which are the trace or realization of theories or critiques of these theories, problematics, etc.; and in the *institutionalized* state, a form of objectification which must be set apart because . . . it confers entirely original properties on the cultural capital which it is presumed to guarantee' (Bourdieu 1986, p. 243)

'an asset that embodies, stores or gives rise to cultural value independently of whatever economic value it may possess . . . *Tangible cultural capital* occurs in the form of artworks and artefacts such as paintings and sculptures, and heritage buildings, locations and sites. *Intangible cultural capital* comprises artworks that exist in their

pure form as public goods, such as music and literature, and the stock of inherited traditions, values, beliefs and so on that constitute the culture of a group, whether the group is defined in national, regional, religious, political, ethnic or other terms . . . also exists in the cultural networks and relationships that support human activity, and in the variety of cultural manifestations within communities – that is, in cultural "ecosystems" and cultural diversity. . . Both tangible and intangible forms of cultural capital exist as a capital stock held by a country, a region, a city or an individual economic agent' (Throsby 2011, p. 143)

'determines a group's worldview, how it sees the world, how the seen is connected to the unseen, what is taken for granted, what is valued, and what things a group thinks are possible to change. Cultural hegemony allows one social group to impose its worldview, symbols, and reward system on other groups' (Flora, Flora & Gasteyer 2016, p. 16)

'Resources derived from embodiment of and ability to deploy the language, cognition, values, and indicators of the organization or social system; resources stemming from the ability to embody and use the "rules of the game" (Ocasio, Pozner & Milner 2020, p. 319)

Digital capital: 'an individual's digital technology ecosystem that shapes and guides how a user engages with digital technologies. It encompasses the preconditions of effective digital engagement which is necessary for an individual to thrive in a digitalised society . . . Access to infrastructure, quality of access, affordability, skills, technical capacity, user aptitude, and social enablers are elements of a person's digital capital' (Park 2017, pp. 72, 220)

'the "historical accumulation" of both digital competencies (internalised abilities and attitudes [information, communication, safety, content-creation and problem-solving]) and digital devices (external resources) . . . a mediating capital that plays a vital role in transforming previous offline capitals (economic, social, cultural, political and personal) into digital activities and, in turn, in transforming these activities into other capitals' (Ragnedda & Ruiu 2020, pp. 30, 32)

'the social and physical assets that enable digital engagements: the physical kit needed, especially in households with multiple users sharing it; the knowledge and training to use appropriate technology; the satisfaction and confidence that we can and will continue to be able to use it securely and safely; the cash to fund it; the space and time to use it; the family and peer support to allow it to form part of our lives; and, finally, both the local infrastructure to support it and proper and sufficient access to that infrastructure' (Donaghy 2021, p. 54)

Ecological capital: see Natural capital

Economic capital: 'is immediately and directly convertible into money and may be institutionalized in the form of property rights' (Bourdieu 1986, p. 243) 'Resources derived from the ability to bring financial resources to an organization,

either directly or indirectly, or from one's capacity to accrue resources for the

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organization' (Ocasio, Pozner & Milner 2020, p. 319)

see also External economic capital, Financial capital, Internal economic capital

- Educational capital: 'measured by qualifications . . . cultural capital recognized and guaranteed by the educational system (which is very unequally responsible for its acquisition)', 'the educational system, by its monopoly of certification, governs the conversion of inherited cultural capital into educational capital', 'the educational capital held at a given moment expresses, among other things, the economic and social level of the family of origin' (Bourdieu 1984, pp. 13, 80, 105) 'all the resources that come from exogenous sources (society, family, school, etc.) in the actiotope of a person [the interactions between the individual and their material, social and informational environment] . . . which can (but needn't be) employed for improvement of education and learning. It can be regulated through individuals as well as further systems. Five forms of educational capital are distinguished which at least partially can be transferred between each other:
 - *Economic educational capital* is every kind of wealth, possession, money or valuable that can be invested in the initiation and maintenance of educational and learning processes . . .
 - *Cultural educational capital* includes value systems, thinking patterns, models and the like, which can facilitate or hinder the attainment of learning and educational goals . . .
 - *Social educational capital* includes all persons and social institutions that can directly or indirectly contribute to the success of learning and educational processes . . .
 - Infrastructural educational capital relates to materially implemented possibilities for actions that permit learning and education to take place . . .
 - Didactic educational capital means the assembled know-how involved in the design and improvement of educational and learning processes . . .' (Ziegler et al. 2013, pp. 39–41; see also Vladut, Vialle & Ziegler 2015, pp. 43, 44)

'knowledge and skills about how to function in school settings that are not formally or explicitly taught by teachers, but are informally acquired through interactions with others (such as parents, guardians, and older siblings) who learned them through lived experiences . . . include how to study effectively (especially when one has to transcend culturally learned study styles); test-taking skills such as how to read test items strategically; how to readjust one's personal and cultural work habits to match the rhythms, routines, and ethos of educational institutions; and how to master "school-speak," or ways of communicating that are appropriate for schools, sometimes called "academic English," code-shifting, and/or cultural border crossing' (Gay 2015, p. 133)

also known as 'school social and cultural capital' *see also* Academic capital, Campus capital, Learning capital Emotional capital: 'the set of resources (emotional competencies [Self-awareness, Selfregulation, Social awareness, Social skills]) that is inherent to the person, useful for personal, professional and organizational development, and participates in social cohesion and has personal, economic and social returns', 'a component of the human capital defined in the broader sense . . . it is not only based on cognitive skills . . . but also on affect and conative dimensions' (Gendron 2013, p. 28)

'one's trans-situational, emotion-based knowledge, emotion management skills, and feeling capacities, which are both socially emergent and critical to the maintenance of power . . . a form of embodied cultural capital that emerges from the cultural socialization of the "mindful body" where "bodily capacities and cultural requirements meet" (Cottingham 2016, p. 454)

Environmental capital: see Natural capital

Ethnic capital: 'the set of individual attributes, cultural norms, and group-specific institutions that contribute to an ethnic group's economic productivity' (Cutler, Glaeser & Vigdor 2005, p. 206)

'collapses the Bourdieuian distinction between cultural capital, acquired through the family, and social capital as benefits mediated through social networks and group membership . . . a triad of factors – familial adult–child relationships, transmission of aspirations, and attitudes and norms enforcement – that can facilitate educational achievement and social mobility among those with limited economic capital' (Shah, Dwyer & Modood 2010, p. 1112)

'the norms and values on [sic] education obtained through interaction and association with familial and ethnic networks' (Sin 2016, p. 61) *also known as* 'cultural-social capital' and 'ethnicity as social capital'

Experiential capital: 'knowledge sets that had been derived from life and professional experiences . . . manifested through references to self-awareness, motivation, resilience and tenacity' (O'Shea 2016, p. 47) *see also* Identity capital

Expressive action: 'taken to maintain resources already possessed by the actor . . . a means to consolidate resources and to defend against possible resource losses . . . The principle is to access and mobilize others who share interest and control of similar resources so that embedded resources can be pooled and shared in order to preserve and protect existing resources . . . Three types of return may be specified: physical health, mental health, and life satisfaction' (Lin 1999, p. 40)

'actors seek to legitimize and consolidate their existing structural position. Two of the most common forms of expressive action are the search for identity confirmation and the pursuit of positive affect . . . not confined to interpersonal relations. Identity-based motivations can also influence the pattern of interorganizational ties' (Gulati & Srivastava 2014, p. 79)

'action as an expression of people's views', 'presumes that people take part in collective action because they want to express their views . . . they develop feelings of

moral indignation about some state of affairs or some government decision, and wish to make that known . . . not necessarily to enforce political change, but to gain dignity in their lives through struggle and moral expression' (Klandermans 2015, pp. 222, 223)

see also Instrumental action

External economic capital:

- Financial: Consists of all financial funds available to parties outside an organization.
- Non-financial: Consists of externally held capitals of a non-financial nature, which nevertheless have economic value to others' (McElroy & Thomas 2015, p. 428) *see also* Economic capital, Financial capital
- Familial capital: 'cultural knowledges nurtured among *familia* (kin) that carry a sense of community history, memory and cultural intuition . . . engages a commitment to community well being and expands the concept of family to include a more broad understanding of kinship . . . nurtured by our "extended family", which may include immediate family (living or long passed on) as well as aunts, uncles, grandparents and friends' (Yosso 2005, p. 79)
- Field: 'a network, or a configuration, of objective relations between positions objectively defined, in their existence and in the determinations they impose upon their occupants, agents or institutions, by their present and potential situation (*situs*) in the structure of the distribution of species of power (or capital) whose possession commands access to the specific profits that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology, etc.) . . . capital does not exist and function but in relation to a field: it confers a power over the field, over the materialized or embodied instruments of production or reproduction whose distribution constitutes the very structure of the field, and over the regularities and the rules which define the ordinary functioning of the field, and thereby over the profits engendered in this field' (Wacquant & Bourdieu 1989, pp. 39–40)

'bundles of relations . . . a set of objective, historical relations between positions anchored in certain forms of power (or capital) . . . each field prescribes its particular values and possesses its own regulative principles. These principles delimit a socially structured space in which agents struggle, depending on the position they occupy in that space, either to change or to preserve its boundaries and form' (Wacquant 1992, p. 16) *also known as* 'social field'

Financial capital: 'plays an important role in our economy by reflecting the productive power of the other types of capital, and enabling them to be owned and traded . . . it has no *intrinsic* value; whether in shares, bonds or banknotes, its value is purely representative of natural, human, social or manufactured capital' (Porritt 2007, p. 139) 'includes savings, income generation, fees, loans and credit, gifts and philanthropy, taxes, and tax exemption . . . is much more mobile than the other capitals and tends to be privileged because it is easy to measure. Community financial capital can be

assessed by changes in poverty, firm efficiency, diversity of firms, and local people's increased assets' (Flora, Flora & Gasteyer 2016, p. 16)

see also Economic capital

- Five capitals framework: 'a hypothetical model of sustainable capitalism. It entails five separate "stocks" [of capital]: natural, human, social, manufactured and financial' (Porritt 2007, p. 138)
- Funds of knowledge: 'historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being'. 'Capitalizing on cultural resources for teaching allows both teachers and students to continually challenge the status quo, especially in terms of how the students are using literacy as a tool for inquiry and thinking, and to refurbish their learning with new topics, activities, and questions . . . students can learn how to make use of funds of knowledge from their communities to address new issues or problems found in the literature, or use the knowledge from the literature to rethink issues in the community, thus providing alternatives (and new mediated connections) for thinking that would otherwise not exist' (Moll & González 1994, pp. 443, 451, 453) *see also* Community cultural wealth
- **Graduate capital model (GCM):** 'conceptualises employability as constituting a range of dynamic, interactive forms of capital which are acquired through graduates' lived experiences
 - Human capital: knowledge, skills and future performance
 - Social capital: networks and human relationships
 - Cultural capital: employability and cultural synergy and alignment
 - Identity capital: self-concept and personal narratives
 - Psychological capital: resilience and career adaptability' (Tomlinson 2017, pp. 340–348)

see also Career capital

Habitus: 'a system of lasting, transposable dispositions which, integrating past experiences, functions at every moment as a *matrix of perceptions, appreciations, and actions* and makes possible the achievement of infinitely diversified tasks . . . expresses first the *result of an organizing action*, with a meaning close to that of words such as structure; it also designates a *way of being*, a *habitual state* (especially of the body) and, in particular, a *predisposition, tendency, propensity*, or *inclination*' (Bourdieu 1977, pp. 82–83, 214)

'a *mediating* notion that helps us revoke the common-sense duality between the individual and the social by capturing "the internalization of externality and the externalization of internality", that is, the way society becomes deposited in persons in the form of lasting *dispositions*, or trained capacities and structured propensities to think, feel, and act in determinate ways, which then guide them in their creative responses to the constraints and solicitations of their extant milieu' (Wacquant 2006, p. 318)

Heterophily principle: 'a tendency for friendships to form between those who differ in some designated respect' (Lazarsfeld & Merton 1954, p. 23) 'the degree to which two or more individuals who interact are different in certain

attributes' (Rogers 2003, p. 19)

also known as 'heterophily effect' and 'heterophily hypothesis'

Homophily principle: 'a tendency for friendships to form between those who are alike in some designated respect' (Lazarsfeld & Merton 1954, p. 23)
'intimate social relationships tend to occur among persons of equal social rank or status... Persons prefer to establish intimate social relationships with other persons of comparable occupational status or prestige' (Laumann 1965, pp. 28, 36)
'the degree to which two or more individuals who interact are similar with respect to certain attributes, such as beliefs, education, social status, and the like' (Rogers 2003, p. 19)

also known as 'homophily effect', 'homophily hypothesis' and 'the like-me hypothesis'

Human capital: 'an economic concept . . . not intended to serve those who are engaged in analyzing psychological, social, or cultural behavior. It is a form of capital because it is the source of future earnings, or of future satisfactions, or of both . . . the acquisition of knowledge and skills that have economic value' (Schultz 1972, pp. 5, 6)

'takes many forms, including skills and abilities, personality, appearance, reputation, and appropriate credentials . . . knowledge embodied in people' (Becker 1993, pp. 262, 326)

'consists of health, knowledge, skills and motivation (all of which are required for productive work), as well as an individual's emotional and spiritual capacities . . . the physical, intellectual, emotional and spiritual capacities of any individual' (Porritt 2007, pp. 139, 163–164)

'the knowledge, skills and know-how that employees "take with them when they leave at night". Examples are, innovation capacity, creativity, know-how, previous experience, teamwork capacity, employee flexibility, tolerance for ambiguity, motivation, satisfaction, learning capacity, loyalty, formal training, and education' (OECD 2008, p. 10)

'the capabilities and potential of individuals determined by the intersection of nature (genetics) and nurture (social interactions and the environment). Human capital includes education, skills, health, and self-esteem' (Flora, Flora & Gasteyer 2016, p. 16)

also known as 'employee competence' and 'individual capital'

Identity capital: 'what individuals "invest" in "who they are" . . . portfolios comprising two types of assets, one more sociological and the other more psychological', 'can be tangible in the sense that they are "socially visible" . . . educational credentials, fraternity/sorority and club/association memberships, and personal deportment (e.g. manner of dress, physical attractiveness and speech patterns) . . . effective as "passports" into other social and institutional spheres . . . important in the micropolitics involved in identity negotiations', 'also intangible . . . commitments, ego strength, self-efficacy, cognitive flexibility and complexity, self-monitoring, critical thinking abilities, moral reasoning abilities, and other character attributes that can give individuals certain vitalities and capacities with which to understand and negotiate the various social, occupational and personal obstacles and opportunities they are likely to encounter' (Côté 1996, pp. 425, 426)

'attributes associated with sets of psychosocial skills, largely cognitive in nature, that appear to be necessary for people to intelligently strategize and make decisions affecting their life courses (i.e., to individualize), especially in the absence of cultural guidance and societal norms . . . can include assets defined as human capital (occupational skills), social capital (reciprocal networks) and even cultural capital (taste and preferences), that can be deployed from a person's portfolio as growthenhancing and/or community-building opportunities arise' (Côté 2005, pp. 225, 227)

'our collection of personal assets. It is the repertoire of individual resources that we assemble over time . . . the investments we make in ourselves, or the things we do well enough, or long enough, that they become part of who we are. Some identity capital goes on a résumé such as degrees, jobs, test scores, and clubs. Other identity capital is more personal, such as how we speak, where we are from, how we solve problems, how we look. Identity capital is how we build ourselves – bit by bit, over time . . . what we bring to the adult marketplace. It is the currency we use to metaphorically purchase jobs and opportunities and other things we want' (Jay 2012, pp. 6-7)

also known as 'personal capital'

see also Experiential capital

- Information(al) capital: 'strategic information the availability of information systems and knowledge applications and infrastructure required to support the strategy', 'the company's databases, information systems, networks and technology infrastructure' (Kaplan & Norton 2004b, p. 13) *also known as* 'information/technology capital'
- Innovation capital: 'integrates variables or elements identified as intellectual value accelerators . . . that act as facilitators of "creativity capability" and innovation' (Bueno, Merino & Murcia 2016, p. 96)

'consists of four factors: who you are (innovation-specific human capital – your capacity for forward thinking, creative problem-solving, and persuasion); who you know (innovation-specific social capital – your social connections with people who have valuable resources for innovation); what you have done (innovation-specific reputation capital – your track record and reputation for innovation); and the things you do to generate attention and credibility for yourself and your ideas (. . . *impression amplifiers*)' (Dyer, Furr & Hendron 2020, p. 71)

also known as 'entrepreneurship and innovation capital' and 'renewal capital' *see also* Organisation(al) capital

- Institutional capital: 'Resources derived from the ability to define the rules of the game, establish the value of different forms of capital, and create symbolic systems of classification' (Ocasio, Pozner & Milner 2020, p. 320)
- Instrumental action: 'taken to obtain resources not possessed by the actor . . . three possible returns: economic return, political return, and social return. Each return can be seen as added capital . . . reputation is an indication of social gain . . . which, along with material resources (such as wealth) and hierarchical positions (such as power) constitutes one of the three returns fundamental in instrumental actions' (Lin 1999, p. 40)

'actors aim to improve their structural position. At both the interpersonal and interorganizational levels, two of the most common forms of instrumental action are the search for novel information and the pursuit of influence to manage interdependencies with other actors' (Gulati & Srivastava 2014, p. 79) 'action as an attempt to influence the social and political environment', 'presumes that participants take part because they believe that they can change their social and political environment at affordable costs . . . Instrumental action presupposes an effective movement that is able to enforce some wanted changes or at least to mobilize substantial support . . . aimed at some external goal' (Klandermans 2015, p. 222) *see also* Expressive action

- Instrumental political capital: 'resources that actors can use to influence policies in their own interest' (Green & Haines 2016, p. 283)
- Intangible assets: 'technological capability, production know-how, marketing savvy, brand name, good credit standing, management skill, organizational culture, and so on . . .
 - (i) resources that are means for market exchange,
 - (ii) resources that have limited, if any, availability in the market,
 - (iii) resources that are both input and output of the firm's activity and reproducible by the firm at great effort and time
 - (iv) resources that are flexible in their uses' (Itami 1984, pp. 22, 23)

'may be classified as "assets" or "skills". Assets include the intellectual property rights of: patents, trademarks, copyright and registered designs; as well as contracts, trade secrets and data bases . . . reputation may also be classified as an asset due to its characteristic of "belongingness" . . . Skills, or competencies, include the know-how of employees (as well as suppliers and advisers), and the collective aptitudes which add up to organizational culture' (Hall 1992, p. 136)

also known as 'distinctive competence', 'intangibles', 'invisible assets' and 'nonmaterial resources'

see also Intellectual capital

KEY CONCEPTS IN INTELLECTUAL AND SOCIAL CAPITAL AND NETWORKS

Intellectual capital: 'intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth . . . collective brainpower', 'the sum of an organization's patents, processes, employees' skills, technologies, information about customers and suppliers, and old-fashioned experience . . . everything everybody in a company knows that gives it a competitive edge' (Stewart 1997, pp. x, 66–67)

'the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice' (Nahapiet & Ghoshal 1998, p. 245)

'can be both the end result of a knowledge transformation process and the knowledge itself that is transformed into intellectual property or assets' (Snyder & Pierce 2002, p. 475)

'intellectual assets . . . have three core characteristics: i) they are sources of probable future economic profits; ii) lack physical substance; and iii) to some extent, they can be, retained and traded by a firm' (OECD 2006, p. 9)

'Accumulation of knowledge that creates value or cognitive wealth owned by an organization, composed of a set of intangible assets (intellectual) or knowledge based resources and capabilities, which when put into action, as determined strategy, in combination with physical capital or tangible, it is able to produce goods and services and create competitive advantages or core competencies for the organization in the market' (Bueno, Merino & Murcia 2016, p. 95)

also known as 'intellectual resources' and 'knowledge assets'

see also Intangible assets

Internal economic capital:

- 'Financial: Consists of the pool of funds available to an organization, including debt and equity finance. This description of financial capital focuses on the sources of funding (liabilities on the balance sheet) rather than its application, which usually results in the acquisition of assets, such as land, buildings, plant and inventories or other forms of capital (e.g. intellectual property).
- Non-financial: Consists of assets not recognized in internal financial capital. They
 may or may not be monetized. An example is the value of brands that have been
 developed organically internally, but not recognized in the financial accounts'
 (McElroy & Thomas 2015, pp. 427–428)

see also Economic capital, Financial capital

Knowledge assets: 'Information relevant to an enterprise's business function, including the captured and tacit knowledge of employees, customers or business partners; data and information stored in structured databases; data and information stored in textual form and unstructured databases (e.g., e-mail and workflow systems); information stored in digital and paper documents; purchased content; and public content from the Internet or other sources' (Gartner 2022a) *see also* Intellectual capital Knowledge capital: 'the combination of internal structure [structural capital] and individual competence [human capital] . . . two stocks: Individual Competence and Tools & Processes' (Sveiby, Linard & Dvorsky 2002, "Knowledge capital" section, para. 1; "Overview of Key Facets" section, para. 3)

'Intangible assets of an enterprise that are required to achieve business goals, including employees' knowledge; data and information about processes, products, customers and competitors; and intellectual property such as patents or regulatory licenses' (Gartner 2022b)

'Resources derived from organizationally relevant individual abilities, talents, education, and experience, formal or informal, tacit or explicit, and independent of structural position. Relevant knowledge can be objectively critical to the organization or socially constructed by the direction of local attention' (Ocasio, Pozner & Milner 2020, p. 319)

also known as 'information(al) capital' *see also* Intellectual capital

- Learning capital: 'all endogenous resources for education and learning established by the individual their self within the actiotope [the interactions between the individual and their material, social and informational environment] . . . which is exclusively accessible to individuals for improvement of education and learning. It is created by the individual himself and is available in his/her actiotope. The actiotope model distinguishes between five forms of learning capital:
 - *Organismic learning capital* consists of the physiological and constitutional resources of a person . . .
 - *Actional learning capital* means the action repertoire of a person the totality of actions they are capable of performing . . .
 - *Telic learning capital* comprises the totality of a person's anticipated goal states that offer possibilities for satisfying their needs . . .
 - *Episodic learning capital* concerns the simultaneous goal- and situation-relevant action patterns that are accessible to a person . . .
 - Attentional learning capital denotes the quantitative and qualitative attentional resources that a person can apply to learning . . .' (Ziegler et al. 2013, pp. 40, 41–42; see also Vladut, Vialle & Ziegler 2015, pp. 43, 45)

see also Academic capital, Campus capital, Educational capital

Linguistic capital: 'Linguistic exchange . . . is also an economic exchange, which is established within a particular symbolic relation of power between a producer, endowed with a certain linguistic capital, and a consumer (or a market), and which is capable of procuring a certain material or symbolic profit [of distinction] . . . utterances are not only (save in exceptional circumstances) signs to be understood and deciphered; they are also *signs of wealth* intended to be evaluated and appreciated, and *signs of authority*, intended to be believed and obeyed . . . linguistic practice inevitably communicates information about the (differential) manner of communicating, i.e. about the *expressive style*, which, being perceived and appreciated with reference to the universe of theoretically or practically competing styles, takes on a social value and a symbolic efficacy' (Bourdieu 1991, pp. 66–67) 'includes the intellectual and social skills attained through communication experiences in more than one language and/or style . . . also refers to the ability to communicate via visual art, music or poetry' (Yosso 2005, pp. 78–79)

Linking social capital: 'the vertical ties between poor people and people in positions of influence in formal organizations (banks, agricultural extension offices, the police)... captures a vitally important additional feature of life in poor communities: that their members are usually excluded – by overt discrimination or lack of resources – from the places where major decisions relating to their welfare are made' (World Bank 2000, p. 128)

'norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society', 'social relationships that . . . connect people across explicit "vertical" power differentials, particularly as it pertains to accessing public and private services that can only be delivered through on-going face-to-face interaction, such as classroom teaching, general practice medicine, and agricultural extension' (Szreter & Woolcock 2004, p. 655)

see also Bridging social capital

Maintained social capital: 'the ability to maintain valuable connections as one progresses through life changes . . . to keep in touch with a social network after physically disconnecting from it . . . relationships as weak, bridging ties', 'the ability to get assistance from a *previously inhabited* community' (Ellison, Steinfield & Lampe 2007, pp. 1146, 1148, 1153)

see also Bridging social capital

Manufactured capital: see Built capital

Mobility capital: 'a taste for living abroad . . . a subcomponent of human capital, enabling individuals to enhance their skills because of the richness of international experience gained by living abroad', 'composed of four main constituent elements . . . family and personal history, previous experience of mobility including language competence, the first experience of adaptation which serves as an initiation, and finally the personality features of the potential wanderer' (Murphy-Lejeune 2002, pp. 51, 52) 'degree attainment, knowledge, taste, and cosmopolitan attitude and lifestyle, understood as exclusive resources that designate one's class and status . . . the symbolic and cultural resources to demarcate global elites from others' (Kim 2011, pp. 113, 121)

'globally-oriented and cosmopolitan knowledge, skills and dispositions obtained through international education and which can be mobilised to obtain distinction, specifically, superior employment and prestige' (Sin 2016, p. 57)

'academic capital acquired in a foreign university . . . recognized credentials alongside

less readily quantifiable skills and capacities . . . may involve accepting different modes of thinking about work or new ways of socially relating to other people', 'comprised of a dynamic range of these [social, economic, cultural and academic capital] resources: expanded social networks, a higher earning potential, better understandings of other societies and internationally recognized educational credentials acquired while abroad' (Hu & Cairns 2017, p. 176) *also known as* 'foreign/global cultural capital'

Monocapitalism: 'capitalism designed to grow and concentrate one form of vital capital – financial capital – very often at the expense of the ongoing viability of other capitals' (Baue 2020, p. 16) *see also* Multicapitalism

Moral capital: 'refers to individual conduct [and] is required for social capital formation . . . reaches beyond the needs of specific professions or occupations, and its accumulation depends on many more factors than education', 'consists of justice, beneficence, and temperance' (Ratnapala 2003, p. 216) 'part of human capital . . . comprises well-developed character traits, virtue formed through asceticism, a set of moral norms and values which are internalised or incorporated within oneself, and moral skills, such as loyalty, honesty, ardour, assiduity, and moderation' (Wódka 2017, p. 72)

- Multicapitalism: 'capitalism designed to maintain the carrying capacities of *all* vital capitals (natural, human, social, intellectual, constructed, and financial) respecting normative thresholds . . . as a means of creating System Value or value that accrues in dynamic balance across all capitals, and the systems associated with them . . . applies to both ecological and social sustainability thresholds', 'recognizes that many of the capitals can be categorized as Common Capitals, and thus require an economic doctrine predicated not only on private ownership but also on collective and cooperative stewardship that transcends the notion of ownership', 'a comprehensive and holistic doctrine that mirrors the dynamics of complex self-regulating living systems' (Baue 2020, pp. 11, 18, 27)
- MultiCapital scorecard (MCS): 'a kind of pluralistic form of capital management instead of the traditional monistic one', 'a comprehensive Triple Bottom Line [Social Bottom Line, Economic Bottom Line, Environmental Bottom Line] measurement and reporting system . . . capital- and context-based . . . places impacts on *all* vital capitals on behalf of *all* stakeholders on a level playing field' (McElroy & van Engelen 2012, p. 52; McElroy & Thomas 2015, pp. 426, 434).

also known as 'multicapital framework' and 'multiple capitals-based framework'
Multiplexity (dyadic multiplexity): 'The degree to which pairs of individuals are linked by multiple relations' (Tichy, Tushman & Fombrun 1979, p. 508)
'A multiplex relation occurs when actors share different roles, actions, or affiliations that overlap in a relationship, such as co-workers who are also friends outside of work', 'individuals share "multiple bases for interaction" with each other, such as

when the actors in a relationship play different roles, maintain different affiliations, or engage in different types of activities and exchanges . . . overlapping ties create a "coexistence of different normative elements in a social relationship", which can solidify or strain the relationship or alter the nature of the relationship altogether' (Kuwabara, Luo & Sheldon 2010, pp. 239, 240)

(network multiplexity): 'the interaction of exchanges within *and across* relationships. This is inclusive of dyadic multiplexity as well as situations in which a relationship of one type with one actor is interdependent on one or more relationships of other types with other actors' (Bliemel, McCarthy & Maine 2014, p. 370)

- Natural capital: 'any stock or flow of energy and matter that yields valuable goods and services. It falls into several categories: resources, some of which are renewable (timber, grain, fish and water), while others are not (fossil fuels); sinks which absorb, neutralize or recycle waste; and services, such as climate regulation. Natural capital is the basis not only of production but of life itself (Porritt 2007, p. 139)
 - 'Natural resources: Consist of air, land, water, minerals, flora, fauna, ecosystems and other natural biophysical resources that humans and non-humans alike rely on for their well-being.
 - Ecosystem services: Consist of services or functions provided by ecosystems that humans and non-humans alike rely on for their well-being' (McElroy & Thomas 2015, p. 427)

'includes the air, water, soil, wildlife, vegetation, landscape, and weather that surround us and provide both possibilities for and limits to community sustainability. Natural capital influences and is influenced by human activities. It forms the basis of all the other capitals' (Flora, Flora & Gasteyer 2016, p. 15) *also known as* 'ecological/environmental capital'

- Navigational capital: 'skills of maneuvering through social institutions . . . acknowledges individual agency within institutional constraints, but it also connects to social networks that facilitate community navigation through places and spaces including schools, the job market and the health care and judicial systems' (Yosso 2005, p. 80)
- Network closure (cohesive groups): 'networks in which everyone is connected such that no one can escape the notice of others, which . . . usually means a dense network'. 'Closure describes how dense or hierarchical networks lower the risk associated with transaction and trust' (Burt 2001, pp. 37, 52)
- **Organisation(al) capital:** 'systems and structures, brands, intellectual property and other intangibles that support value creation', 'processes, procedures, manuals, and databases including the knowledge embedded within them' (Peppard & Rylander 2001, pp. 514, 520)

'Culture – awareness and internalization of the shared mission, vision, and values needed to execute the strategy; Leadership – the availability of qualified leaders at all levels to mobilize the organizations toward their strategy; Alignment – alignment of

goals and incentives with the strategy at all organization levels; Teamwork – the sharing of knowledge and staff assets with strategic potential', 'the company's culture, its leadership, how aligned its people are with its strategic goals, and employees' ability to share knowledge' (Kaplan & Norton 2004b, p. 13) 'Resources derived from control over strategic resources, discretion and legal authority, reward, and coercive power afforded to certain organizational positions' (Ocasio, Pozner & Milner 2020, p. 320) *also known as* 'administrative capital' and 'organisational intelligence'

see also Structural capital

Personal capital: see Identity capital

- **Personal learning networks (PLNs):** 'The networked learner receives information from various sources and in turn becomes a source for others' PLNs:
 - *Personally maintained synchronous connections* . . . includes the people and places you consult to answer questions, solve problems, and accomplish goals.
 - *Personally and socially maintained semisynchronous connections* . . . [questions] sent out to a community of people who, because of their interests, expertise, or perspectives, are in a position to help you.
 - Dynamically maintained asynchronous connections . . . connects us with content sources that we have identified as valuable' (Warlick 2009, pp. 13–14, 15)

'a collection of resources or nodes (people, content sources, etc.) that an individual accesses as needed for his or her learning . . . people such as friends, family, colleagues, former teachers or students, and other individuals who are knowledgeable about a subject; and things such as books, professional journals, professional organizations, professional conferences, blogs, and online communities like LinkedIn, and Twitter feeds' (Manning 2015, p. 5)

'the total preferred connections to and interactions with the different people, technological devices, services, and information resources that an individual chooses to use to assist with any learning activity in all learning contexts for the purposes of achieving any form of learning outcome . . . PLNs are (largely) autonomously built, maintained and used by the creator, but are also heavily shaped by the wider sociocultural contexts within which the creator and the network are situated' (Fair 2021, p. 213)

Physical capital: see Built capital

Political capital: 'a form of symbolic capital, *credit* founded on *credence* or belief and *recognition* or, more precisely, on the innumerable operations of credit by which agents confer on a person (or on an object) the very powers that they recognize in him (or it)' (Bourdieu 1991, p. 192)

'the ability to use power or authority and gain the support of constituents in a socially effective way' (Harvey & Novicevic 2004, p. 1177)

'the ability of a community or group to turn its norms and values into standards, which are then translated into rules and regulations that determine the distribution of resources. Political capital is also mobilized to ensure that those rules, regulations, and resource distributions are (or are not) enforced', 'consists of organization, connections, voice, and power . . . a group's ability to influence the distribution of resources within a social unit' (Flora, Flora & Gasteyer 2016, pp. 16, 184) 'the variety of economic, social, and cultural resources available to individuals and groups to affect organizational decisions, actions, and outcomes . . . stocks of resources that can be actively acquired and used by social actors to build their force and power' (Ocasio, Pozner & Milner 2020, pp. 303, 317) *see also* Instrumental political capital, Structural political capital

Prestige effect: 'persons choosing others for close relationships tend to name those of somewhat higher socio-economic status than themselves . . . social distance is strongly correlated to the prestige ordering of the occupations'. 'Regardless of their own occupational status or rank, persons prefer to establish intimate social relationships with other persons in occupations of higher status or rank' (Laumann 1965, pp. 28, 33–34, 36)

'individuals prefer to associate with others with somewhat better social status . . . such [heterophilous] interaction is expected to enhance the prestige of the less advantaged actors', 'individuals tend to pursue interaction with others of similar or slightly higher, rather than lower, socioeconomic status . . . *the weaker the tie, the more likely ego will have access to better social capital (at least in terms of resource heterogeneity and upper reachability)*'. 'The expectation is that vertical (heterophilous) actions and interactions are effective for instrumental purposes [gaining valued resources], whereas horizontal (homophilous) actions and interactions are effective for expressive purposes [maintaining valued resources]' (Lin 2001, pp. 47–48, 69, 176) *also known as* 'prestige hypothesis' and 'prestige principle'

Process capital: 'the institutionalized knowledge and the competencies necessary for efficient value creation from the perspective of organizational infrastructure' (Matthies 2014, p. 91)

see also Organisational capital, Structural capital

- Propinquity effect: 'Propinquity refers to the proximity or physical closeness of one person to another. The greater the degree of propinquity, the more likely that two people will be attracted to each other and become friends. Propinquity is usually thought of in terms of functional distance that is, the likelihood of coming into contact with another person rather than sheer physical distance' (Reis 2007, p. 708) 'Tendency for personal ties or relationships to develop between people who are, by virtue of residence or role, closest in physical space' (Emler 2006, p. 268) *also known as* 'proximity effect'
- **Psychological capital:** 'is an individual's positive psychological state of development and is characterized by:
 - having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks;

- (2) making a positive attribution (optimism) about succeeding now and in the future;
- (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and
- (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success' (Luthans, Youssef & Avolio 2007, p. 3)

also known as 'PsyCap' and 'the HERO within' (Hope, Efficacy, Resilience, Optimism) **Reciprocity:** 'The degree to which a relation is commonly perceived and agreed on by

all parties to the relation (i.e., the degree of symmetry)' (Tichy, Tushman & Fombrun 1979, p. 508)

'the act of giving benefits to another in return for benefits received . . . may be either direct or indirect. When reciprocity is direct, the recipient of a benefit returns a benefit directly to the giver . . . When reciprocity is indirect, as in generalized forms of exchange, the recipient does not return a benefit directly to the giver, but to another actor in the social circle . . . both direct and indirect reciprocity can vary in both instrumental value and symbolic value' (Molm, Schaefer & Collett 2007, pp. 200–201)

'three distinct but related orientations . . .

- *Exchange*. Participants give and receive something from the others that they would not otherwise have . . . the interchange of benefits, resources, or actions.
- *Influence*. The processes and/or outcomes of the collaboration are iteratively changed as a result of being influenced by the participants and their contributed ways of knowing and doing . . . a relational connection that is informed by personal, social, and environmental contexts.
- *Generativity*. As a function of the collaborative relationship, participants (who have or develop identities as co-creators) become and/or produce something new together that would not otherwise exist . . . transformation of individual ways of knowing and being or of the systems of which the relationship is a part' (Dostilio et al. 2012, pp. 19–20)

'a pattern of mutually contingent exchange of gratifications, or tit for tat... one of the universal aspects of moral codes all around the world and has been argued to be key for social stability. Reciprocal social mores range from mutual gift exchange to rules of hospitality. As a normative concept, reciprocity typically focuses on an individual's or an organization's return of proportional or equivalent benefits for benefits bestowed by others' (Orlitzky 2018, p. 2872)

Relational capital: 'internal and external networks and relationships' (Edvardsson, Edvinsson & Nyström 1993, p. 87)

'the set of explicit and tacit knowledge concerning the way in which the organization deals with external agents' (Castellanos, Rodríguez & Ranguelov 2004, p. 480) 'the resources arising from the external relationships of the firm with customers, suppliers and R&D partners. It comprises that part of human capital and structural capital involved with the company's relations with such stakeholders. Examples are image, customer loyalty, customer satisfaction, links with suppliers, commercial power and negotiating capacity with financial entities' (OECD 2008, p. 11) *also known as* 'customer capital', 'external structure', 'market(ing) capital', 'network capital' and 'relationship capital'

see also Business capital

- **Reputational capital:** 'Resources derived from perceived reputation for successful performance within the organization or relevant external contexts, not necessarily connected to the actual performance' (Ocasio, Pozner & Milner 2020, p. 320)
- **Resistant capital:** 'knowledges and skills fostered through oppositional behavior that challenges inequality . . . transformative resistant capital includes cultural knowledge of the structures of racism and motivation to transform such oppressive structures' (Yosso 2005, pp. 80–81)
- Resource(s): 'firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness . . . strengths that firms can use to conceive of and implement their strategies' (Barney 1991, p. 101)

'A firm's resources and capabilities include all of the financial, physical, human, and organizational assets used by a firm to develop, manufacture, and deliver products or services to its customers. Financial resources include debt, equity, retained earnings, and so forth. Physical resources include the machines, manufacturing facilities, and buildings firms use in their operations. Human resources include all the experience, knowledge, judgment, risk taking propensity, and wisdom of individuals associated with a firm. Organizational resources include the history, relationships, trust, and organizational culture that are attributes of groups of individuals associated with a firm, along with a firm's formal reporting structure, explicit management control systems, and compensation policies' (Barney, 1995, p. 50)

'an asset that people can "cash in," literally or metaphorically' (Côté & Levine 2002, p. 143)

Resource-based view (RBV): 'clarifies to what extent organizational resources affect strategic performance differentials among firms . . . assumes that firms are administrative organizations involving collections of physical (human) and intangible assets or, synonymously, bundles of idiosyncratic resources and capabilities. The RBV has evolved from economic theory and explains the role of resources that are available to a firm in pursuit of a sustainable competitive advantage' (Gudergan & Schweitzer 2008, pp. 1379–1380).

'a theoretical framework for understanding firm-level competitive advantage. The RBV views resources and capabilities as the fundamental sources of value creation and rests on two fundamental assumptions: that resources and capabilities are heterogeneously distributed among firms and that they are imperfectly mobile.

These assumptions allow for differences in firm resource endowments to both exist and persist over time' (Newbert 2013, p. 666).

also known as 'resource-based theory (RBT)'

Social and cultural reproduction: 'the logic by which the transformation of the social heritage into a scholastic heritage operates in different class situations . . . By giving individuals educational aspirations strictly tailored to their position in the social hierarchy, and by operating a selection procedure which, although apparently formally equitable, endorses real inequalities, schools help both to perpetuate and legitimize inequalities. By awarding allegedly impartial qualifications . . . for socially conditioned aptitudes which it treats as unequal "gifts", it transforms *de facto* inequalities into *de jure* ones and *economic and social* differences into *distinctions of quality*, and legitimates the transmission of the cultural heritage' (Bourdieu 1974 [1966], pp. 37, 42)

'the contribution made by the educational system to the reproduction of the structure of power relationships and symbolic relationships between classes, by contributing to the reproduction of the structure of the distribution of cultural capital among these classes . . . the apprehension and possession of cultural goods as symbolic goods (along with the symbolic satisfactions which accompany an appropriation of this kind) are possible only for those who hold the code making it possible to decipher them'. 'An educational system which puts into practice an implicit pedagogic action, requiring initial familiarity with the dominant culture . . . offers information and training which can be received and acquired only by subjects endowed with the system of predispositions that is the condition for the success of the transmission and of the inculcation of the culture' (Bourdieu 2006 [1973], pp. 257, 259, 267)

Social capital: 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectively-owned capital, a "credential" which entitles them to credit, in the various senses of the word' (Bourdieu 1986, pp. 248–249)

'a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that in its absence would not be possible . . . Unlike other forms of capital, social capital inheres in the structure of relations between actors and among actors' (Coleman 1988, p. S98)

'relationships with other players . . . friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital . . . a thing owned jointly by the parties to a relationship' (Burt 1992, pp. 8–9) 'The advantage created by a person's location in a structure of relationships . . . explains how people do better because they are somehow better connected with other people.' 'Brokerage and closure together define a network concept of social capital, structural autonomy, in which advantage is greatest when closure within a group occurs with brokerage beyond the group' (Burt 2005, pp. 4, 225)

'features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit' (Putnam 1995, p. 67) 'the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network' (Nahapiet & Ghoshal 1998, p. 243)

- (1) 'investment in social relations with expected returns'
- (2) 'resources embedded in a social structure which are accessed and/or mobilized in purposive actions'
- (3) 'investment in social relations by individuals through which they gain access to embedded resources to enhance expected returns of instrumental or expressive actions' (Lin 1999, pp. 30, 35, 39)

'shared norms or values that promote social cooperation, instantiated in actual social relationships . . . a utilitarian way of looking at culture . . . not a public good, it is a private good that produces extensive positive and negative externalities' (Fukuyama 2002, pp. 27, 29)

see also Bridging, Bonding, Linking and Maintained social capital

Social network: 'a finite set or sets of actors and the relation or relations defined on them. The presence of relational information is a critical and defining feature of a social network' (Wasserman & Faust 1994, p. 20)

'a set of socially relevant nodes connected by one or more relations' (Marin & Wellman 2011, p. 11)

'a set of actors or nodes along with a set of ties of a specified type (such as friendship) that link them. The ties interconnect through shared endpoints to form paths that indirectly link nodes that are not directly tied. The pattern of ties in a network yields a particular structure, and nodes occupy positions within this structure' (Borgatti & Halgin 2011, p. 1169)

Social network analysis (SNA): 'an approach and set of techniques for the study of information exchange . . . focuses on patterns of *relationships* between *actors* and examines the availability of resources and the exchange of resources between these actors. The resources exchanged can be of many types, including tangibles such as goods, services, or money, or intangibles such as information, social support, or influence' (Haythornthwaite 1996, pp. 323–324)

'structural approach that is based on the study of interaction among social actors . . . grounded in the intuitive notion that the patterning of social ties in which actors are embedded has important consequences for those actors' (Freeman 2004, p. 2)

'The aim . . . is to understand a community by mapping relationships that connect them as a network, and then trying to draw out key individuals, groups within the network ("components") and/or associations between the individuals' (Home Office 2016, p. 3)

- Social norms: 'specify what actions are regarded by a set of persons as proper or correct, or improper or incorrect', 'macro-level constructs, based on purposive actions at the micro level . . . a social construction which is part of a feedback process' (Coleman 1990, pp. 242)
- Spiritual capital: 'our shared meaning, our shared purpose, our shared vision of what most deeply matters in life – and how these are implemented in our lives and in our behavioral strategies . . . the amount of spiritual knowledge and expertise available to an individual or a culture' (Zohar & Marshall 2004, p. 41)

'the fund of beliefs, examples, and commitments that are transmitted from generation to generation through a religious, moral or spiritual tradition, and which attach people to the transcendental source of human happiness . . . may be the third or missing leg in the stool [of economic development] which includes its better known relatives, namely, human and social capital' (Malloch 2013, pp. 304, 310) 'the set of values, ethical standpoints and visions for change held by both individuals, groups and institutions . . . shaped not only by systems and practices of belief, but also by engagement with wider sets of relationships (broadly defined) and the sense of meaning and purpose derived from work-based and other activities' (Stokes et al. 2016, p. 40)

also known as 'religious capital' and 'religious social capital'

Strategy maps: 'provide a visual representation of a company's critical objectives and the crucial relationships among them that drive organizational performance . . . show the cause-and-effect links by which specific improvements create desired outcomes . . . show how an organization will convert its initiatives and resources – including intangible assets such as corporate culture and employee knowledge – into tangible outcomes' (Kaplan & Norton 2000, p. 178)

'provides a framework for linking intangibie assets to sharehoider value creation through four interrelated perspectives [financial, customer, internal process, learning and growth]', 'the *learning and growth perspective* . . . identifies the intangible assets that are most important to the strategy . . . which jobs (the human capital), which systems (the information capital), and what kind of climate (the organization capital) are required to support the value-creating internal processes' (Kaplan & Norton 2004a, p. 54)

see also Balanced scorecard

Strong ties ('friends'): 'tend to move in the same circles that we do, the information they receive overlaps considerably with what we already know . . . may be more interested than acquaintances in helping us'. 'If each person's close friends know each other, they form a closely knit clique' (Granovetter 2005, p. 34)

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'the strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the [interpersonal] tie . . . strong ties, breeding local cohesion, lead to overall fragmentation' (Granovetter 1973, pp. 1361, 1378) *see also* Bonding social capital

Structural capital: 'patents, concepts, models, templates, computer systems and other more or less explicit administrative tools and processes . . . The informal power play, the internal networks, the "culture" or the "spirit" can also be regarded as belonging to the internal structure (Sveiby, Linard & Dvorsky 2002, Internal Structure, para. 1) 'the explicit knowledge related to the internal processes in the organization, and can be both organizational (the operating environment derived from the interplay between management and business processes, technology and culture) and technological (patents, licenses, proprietary software, databases and so on)' (Castellanos, Rodríguez & Ranguelov 2004, p. 480)

'existing knowledge, which is the property of the organization and that generates its knowledge base . . . the combination of shared values, culture, routines, protocols, procedures, systems, technological developments and intellectual property of an organization which make up the collective "know how" and which remain in the entity even if people leave the company' (Bueno, Salmador & Longo-Somoza 2014, pp. 340–341)

also known as 'administrative/internal capital' and 'internal structure' *see also* Organisation(al) capital

- Structural holes (network brokerage): 'holes in social structure or more simply, structural holes – create a competitive advantage for an individual whose relationships span the holes . . . People on either side of a structural hole circulate in different flows of information. Structural holes are thus an opportunity to broker the flow of *information* between people, and *control* the projects that bring together people from opposite sides of the hole. Structural holes separate nonredundant sources of information, sources that are more additive than overlapping' (Burt 2000, p. 353)
- Structural political capital: 'attributes of the political system that shape participation in decision making' (Green & Haines 2016, p. 283)
- Symbolic capital: 'commonly called prestige, reputation, fame, etc., which is the form assumed by these different kinds of capital [economic capital, cultural capital and social capital] when they are perceived and recognized as legitimate', 'another name for distinction is nothing other than capital, of whatever kind, when it is perceived by an agent endowed with categories of perception arising from the incorporation of the structure of its distribution, i.e. when it is known and recognized as self-evident' (Bourdieu 1991, pp. 230, 238)

'Resources accrued through category membership, whether acquired – job titles, credentials, formal educational degree, functional background – or ascribed – gender,

race, ethnicity, and age. Includes the formal authority derived from titles' (Ocasio, Pozner & Milner 2020, p. 319)

- Systemic capital: 'wisdom . . . the ability to adjust to changes in the environment demonstrated by the social system, in addition to the ability to create one's own future' (Johannessen, Olsen & Olaisen 2005, pp. 153, 166) *see also* Structural capital
- Technological capital: see Built capital, Information capital
- Transitional capital: 'a synthesis of bridging and bonding capital that [first-generation students] sought out and obtained during their college years but that may not be maintained after graduation . . . an essential and critical type of campus capital that social media technology enabled' (Rowan-Kenyon, Martinez Alemán & Savitz-Romer 2018, pp. 154–155)
- Transnational academic capitalism (TAC): 'an ongoing and open-ended integration of transnational dimensions into teaching, research, and service in a way that enhances integration between universities and globalizing knowledge capitalism. TAC increases opportunities for universities and individual academics to diversify external funding sources across nation-state borders' (Kauppinen & Cantwell 2014, p. 149) *see also* Academic capitalism
- **Trust:** 'a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another', 'the willingness to be vulnerable under conditions of risk and interdependence . . . is not a behavior (e.g., cooperation), or a choice (e.g., taking a risk), but an underlying psychological condition that can cause or result from such actions' (Rousseau et al. 1998, p. 395) 'a person's confident belief that another's motivations are benevolent toward him or her and that the other person will therefore be responsive to his or her needs. Trust is typically viewed as a belief about a specific person, though it has also been viewed as a personality trait characterizing people's tendency to trust or distrust others in general' (Holmes & Cavallo 2007, pp. 998–999)

'the cumulative willingness of members of a group to be vulnerable to the actions of that group, even if they do not know all the other members of the group and even if the actions of other members cannot be monitored or controlled . . . the willingness of members to assume the risk that is part of the group's activities', 'organizational trust rests on the confluence of three antecedents: the strength of networks among group members, shared norms such as helpfulness and reciprocity, and the abilities that each member brings to the group' (Davis & Bartkus 2009, pp. 320, 321, 326) 'diverse forms of trust rest upon different foundations, with different consequences':

• *Knowledge-based or strategic trust* 'rests upon experience . . . is based upon reciprocity . . . We learn to trust people by interacting with them', 'essential in everyday life. It helps us decide who our friends will be and what types of decisions we make'

- Moralistic or generalised trust [also known as out-group trust] 'is a moral command to believe that "most people can be trusted", 'is a value learned early in life – from one's parents – and is stable in time and across generations . . . rests upon a psychological foundation of optimism and control'
- *Particularised trust* 'is trust *only* in people from your own in-group depends upon your own sense of identity [and] a lack of faith in people who are different from yourself', 'is based upon negative stereotypes of out-groups and a sense of insecurity for the future'
- *Institutional trust* 'largely reflects performance, especially the state of the economy. When the economy is strong, people have greater faith in governmental, economic, and even social institutions . . . also depends on the popularity of a country's leadership' (Uslaner 2017, pp. 855–857)
- Weak ties ('acquaintances'): 'know people that we do not and, thus, receive more novel information . . . typically less similar to us than close friends. . . they connect us to a wider world. They may therefore be better sources when we need to go beyond what our own group knows' (Granovetter 2005, p. 34)

'an important resource in making possible mobility opportunity . . . play a role in effecting social cohesion . . . seen as indispensable to individuals' opportunities and to their integration into communities' (Granovetter 1973, pp. 1373, 1378) *see also* Bridging social capital

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